



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,041	03/16/2004	Jin Hong Kim	46500-000143/US	1235
30593	7590	09/29/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			RAEVIS, ROBERT R	
P.O. BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	
			2856	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/801,041

Applicant(s)

KIM ET AL.

Examiner

Robert R. Raevis

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11, 13 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-7 and 12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/24/05</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claims 1-7, 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 1, it's unclear if the "optical disc" is part of the "apparatus". Specifically, the body of the claim suggests that it is (e.g. "plate rotating the optical disc" suggests that the disc *is operatively connected* to the plate), but the preamble's use of the phrase "*for testing an endurance of an optical disc*" (italics added, line 1) is a phrase of intended use, suggesting that the disc is not part of the apparatus. Note that the word "for" is not located after the words "plate"(line 2), "unit" (line 3) and "frame" (line 4).

Claims 6, 4 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As to claim 6, how does vapor cause a pressure in this endurance testing apparatus? As to claims 4 and 12, where are these pressures applied to the scratcher? In particular, page 8 (last three lines) makes it plain that the pressure those values of pressure are "pressure of the frame 40" (line 3 from bottom of p. 8), and Figure 1 does not seem to suggest where that pressure location might be relative to frame 40. Is the location in the rod about element 40 in Figure 1, or is the location a cross section of the widest part of element 40? Please note that the pressure values are not disclosed as being the pressure between the scratcher 31 and disc 20.

Art Unit: 2856

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,4,5,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al in view of Kobayashi et al.

Nakagawa et al teach an apparatus, including: rotation plate 2, and scratching element 4. The scratcher applies a force not to exceed "3 kg/cm²" (col. 4, line 29), reference is made to applying a force equal to the "weight of the test piece" (col. 3, line 25). Figure 3 appears to illustrate some level of scratching, as evidenced by the lack of a smooth wear line.

Nakagawa does not refer to a holder (though one is almost certainly a necessity, as something must hold the element stationary).

As to claims 1,2,4,5, it would have been obvious to employ a frame to hold the element because Kobayashi teaches use of a holder 6 to secure a wear element against a rotating surface 3 of interest for a wear tester. Also, this claim is limited to an "apparatus" (line 1), and not a combined apparatus and optical disc, as evidenced by the use phrase "for testing an endurance of an optical disc" (line 1 of Applicant's preamble).

As to claim 7, Nakagawa's rotating shaft 1 and reference to "300 rpm" (col. 4, line 8) is suggestive of motor usage.

Art Unit: 2856

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al in view of Kobayashi et al as applied to claim 1 above, and further in view of Cotterill et al.

As to claim 6, it would have been obvious to employ gas to supply pressure as Cotterill teaches use of a ram 23 to provide a test pressure of a wear testing device. A ram will provide for the force range taught in Nakagawa.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al in view of Kobayashi et al as applied to claim 1 above, and further in view of Hupf.

Nakagawa relates to both brake and clutch plates, but does not refer to steel wool.

As to claim 3, it would have been obvious to employ steel wool as the test piece 4 because Hupf teaches (col. 4, lines 1-10) that steel wool may be desirably used in abrasion testers because it has various grades that permit for a selection of the level of rigorousness desired in testing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 7am to 4:30pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Art Unit: 2856

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

ROVIS —

RAEVIS —